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ART. IX.—*Abercrombie on the Intellectual Powers.*

Inquiries concerning the Intellectual Powers, and the Investigation of Truth. By JOHN ABERCROMBIE, M.D.
F. R. S. New York. 1832.

The utility of the study of metaphysical subjects has often been called in question, by men whose opinions are entitled to respect and consideration. The different ideas which have been maintained by the various writers on intellectual philosophy, and the violence with which they treat the sentiments of their predecessors and contemporaries, are certainly sufficient reasons for withholding our assent from the doctrines of any particular author, until they have been sufficiently compared and examined. But to deny that any advantages are gained by an acquaintance with the manner in which our mental operations are performed, is carrying our objections to the imperfect efforts of writers on this subject, to a very unwarrantable extent.

Plain practical men often regard metaphysical disquisitions with contempt. This generally arises from the fact that such persons rarely meditate on general subjects, or on those in which they are not immediately concerned; and of course do not give them attention sufficient to be able to judge with accuracy of their importance. There is another reason for our neglect of this study, which, though perceived in a confused manner by most persons, does not fail to affect our actions. We have experienced, in numberless instances, that the things of most importance are in general understood with the greatest ease, and therefore when a subject is presented for our consideration, which is not comprehended without difficulty, we naturally dismiss it as unworthy of our attention. The truth of the last observation, however, though very general, is by no means universal. A reference to the abstruse astronomical calculations, which are indispensably necessary for the mariner, or to the subtle arguments employed by the theologian and jurist in the explanation of principles which are considered as all-important to our happiness, is sufficient to prove that facts, discovered by the most difficult analysis, or deduced by the most extensive and careful reasoning, may be of the

first consequence. That the science of ideas has been cultivated by some fine scholars of the present age, among whom we may reckon this author, is a proof of the estimation in which it is held by those who are best qualified to judge, from their observations and pursuits, of its practical utility.

If we consider that the several branches of the faculty of thinking, as memory, judgment, &c., are improved and strengthened by certain treatment, according to their several qualities, it is obvious that the nature and relations of each should be fully understood, before they can be improved in the highest degree. Mental philosophy is therefore a study necessary for the instructor, as well as for the scholar who would direct his mind in the proper channel to discover truths, to retain them, or to deduce from them the greatest number of important consequences.

Our author appears to think, that the largeness of the number of facts which have relation to mental operations, is what constitutes perfection in this study. In his Introduction he says, 'It is in modern times only that this science has assumed a real value, and a practical importance, under the researches of those eminent men, who have cultivated the philosophy of mind, on the principles which are acted upon in physical science: namely, a careful observation of facts, and conclusions drawn from these by the most cautious induction. The chief hindrance to the cultivation of the science on these principles, arises from the difficulty of procuring the facts, for the only field in which the mental philosopher can pursue his researches with perfect confidence is his own mind.'

The manner of treating the philosophy of the human mind, considered here as proper, is not in our opinion that which is best calculated to carry it to perfection; nor is it the method pursued at present in those physical sciences, which are susceptible of being deduced from principles. That it was the mode in which they were commenced is not denied; but by slow and almost imperceptible gradations they have changed their original character, and at length approach perfection. At first, a mass of facts which had relation to a particular subject was collected, to which others were slowly added. But still these truths could no more be said to constitute a science, than the simple enunciation of the principal properties of spherical triangles could be called spherical geometry or trigonometry. It was only after the facts were compared, and

shown to depend on a few general principles, from which they and many others could be readily deduced, that the science was formed. And in general the more we are able to reduce the original principles which constitute its basis, the nearer we bring it to perfection.

The truth of our reasoning is exemplified in the science of hydrostatics, which is now deduced entirely from the fact, that all parts of the surface of a fluid in a quiescent state, preserve a uniform level. Formerly, a great number of experiments, more or less liable to error, was all that was known concerning it, and thousands of the most useful applications of the science were undiscovered, because no general principles were inferred, from which all possible consequences could be drawn. Mechanics, formerly, was only a description of a number of complicated machines; and as a proof of its imperfection in that state, we have only to refer to the innumerable and very expensive efforts of the greatest philosophers of those days, to discover perpetual motion, or to form a machine which should possess the power of motion in itself, continuing as long as its materials should endure. It is only of late, since the science of Mechanics has been really formed, after the powers of all machines have been deduced from a few elementary principles, that such a machine has been demonstrated to be impossible.

It would therefore appear, that a science is not nearer to perfection, in proportion to the greatness of the number of isolated facts which are known concerning it, but rather to the facility with which all the truths relating to it are derived from a few first principles. It is not denied, that experimental facts are extremely useful in pursuing our researches in any branch of study; the conclusions to which we arrive, in conducting our inquiries, should be constantly compared with them. By this means, not only the falsity of the results to which we arrive may be detected, if we have reasoned incorrectly; but also those things which we have regarded as facts may, on a thorough examination, when compared with our deductions, be found to possess no reality, or to have no relation to the subject. Our remarks of course do not apply to anatomy, medicine, &c., nor to those sciences which are called descriptive: for perfection in these, from the nature of things, really does depend on the number of the truths relating to them which have been observed. It is obvious to any mind, which considers the subject, that there can be no general principles in

such studies, from which facts concerning them may be inferred with any degree of certainty.

Dr. Abercrombie pursues the course which, in his Introduction, he considers as most proper for investigations of the kind under consideration. His method is much the same as that of Reid and Stewart. Many facts are related, which are considered as being experimentally known and understood, and the more immediate consequences are drawn from them. The subject, when discussed in this manner, is susceptible of an almost infinite extension, which Reid, Stewart and some others seem to have fully comprehended. It must be acknowledged that, in some respects, we are less liable to error in pursuing the method of Abercrombie, than when that of which we have spoken is followed : for if the facts which we relate are well examined, and none admitted that are unconnected with the subject, or whose reality is not fully determined, they furnish so many points, on which our minds may rest ; and if we do deviate from the truth in the immediate inferences which are drawn from them, we seldom err so grossly, as when we follow out the consequences of a few principles to a great extent. But then, as we have already intimated, many of the most important truths, which depend on a great number of these facts, can never be discovered.

Abercrombie regards the deficiency of facts as the chief difficulty in conducting metaphysical researches. We think, on the contrary, that if the innumerable facts which have been brought forward in relation to intellectual philosophy, by the host of writers from Aristotle to this day, do not furnish *sufficient materials* to conduct our inquiries on this subject, it is time for us to relinquish such barren and unprofitable speculations.

Our own opinion is, that the science is sufficiently rich in isolated facts ; that no more or very few more are wanted, in order that it may be completely developed in all its branches. It is merely necessary that they should be compared, their relations traced, and that all the operations of the mind should be shown to depend on certain faculties, which can be decomposed into no others more simple. The work under consideration seems, however, not to be intended as an elementary treatise, but rather as a collection of observations on the mind, which may be read by every one, and understood without much meditation. The style is popular,

and of course we are not to expect that careful regard to system, and those close and rigid arguments, which are appreciated only by such as have formed habits of attention and nice discrimination.

The reader must constantly keep in mind, that the author does not profess to confine himself to those subjects which are usually understood to belong to intellectual philosophy, nor even to examine all those which do appertain to that science; but to show the results of certain inquiries which he institutes concerning the intellectual powers and *the investigation of truth*. It will be readily perceived, that inquiries concerning the investigation of truth belong to the science of logic, or the science of the deduction of ideas: indeed they form that science. These last inquiries, pursued under the heads of Reason and Medical Science, occupy more than half the volume, even if we deduct from them the occasional discussions, which are generally ranged under the science of mental philosophy.

Some persons speak of this treatise as ‘elements of the philosophy of the human mind.’ The following is the language of the British Critic. ‘In the very moderate compass of one volume, he has placed within the reach of the student as much sound metaphysical lore as any human being need give, and wish to possess, unless he aspires to very high distinction in that peculiar line of investigation. He has divested his researches of all the frivolous trumpery, in which the philosophers of former days were often in the habit of disguising their ambitious poverty.’ The reviewer here gives the author credit for much more than he claims himself. We strongly suspect that Dr. Abercrombie would agree with us in asserting, that some of the most important branches of logic, and of the philosophy of the human mind, are not discussed, nor indeed hinted at in this work; and that it is in reality what it professes to be, certain inquiries concerning the intellectual powers, and the investigation of truth.

We are moreover by no means certain, that the motive which influenced the writer to attend to these researches, was not the desire to give to others of his profession a method, by which their medical investigations might be conducted with ease and accuracy. We believe, in fact, that this was the case, and that some of the principal outlines of the science of the human intellect were given merely as preliminaries, necessary before

entering on the general plan. To this conclusion we are led by a careful and thorough examination of the work; and we are the more confirmed in our opinion by the fact, that the author himself expressly declares in his introduction, that he was incited to this work by the desire with which we have supposed that he was actuated, and that his plan was precisely such as might be rationally conceived from its execution. He holds the following language.

‘ From the deep interest with which the philosophy of mind thus presents itself to the medical inquirer, I have been induced to attempt a slight outline of this important subject. In doing so, I do not profess to offer any thing new or original. My object is to present to the younger part of the profession some leading facts, which may serve to direct their further inquiries on a subject of great and general interest.

This slight outline of the functions of mind *will be followed* by an attempt to trace the rules, which ought to guide us in applying these powers to the investigation of truth in any department of knowledge. The practical application of the subject will lead to a general view of the laws or principles of philosophical inquiry and inductive science, and will be directed in a more particular manner to the purposes of medical investigation. This is attempted, in a hope that the principles which it is meant to convey may be of use in giving precision to medical investigations, by illustrating those rules of sound instruction, which are acted upon in other departments of science.’

The statements of the reviewer, whom we just now noticed, are completely ridiculous when he says, ‘ He has divested his researches of all the frivolous trumpery, in which the philosophers of former days were often in the habit of disguising their ambitious poverty.’ If, ‘ by philosophers of former days,’ he refers to the ancient logicians or schoolmen, Dr. Abercrombie deserves about as much credit for divesting his researches of all their frivolous trumpery, as a minister of the Gospel of the present day for divesting his researches of the trumpery of the doctrines of the heathen, or as a modern chemist for divesting his researches of the ancient doctrine of combustion. If, by ‘ philosophers of former days,’ he refers to Stewart, Brown, Reid, Locke, Hume, Tracy, Condillac, Descartes or Leibnitz, we think that Abercrombie has received much more credit than he merits. Though his work contains many fine observations and important investigations, so many that we

should strongly recommend it to the perusal of all those for whom it was especially intended, and indeed to any who devote themselves to metaphysical researches, yet it can by no means be compared, as a treatise on the human mind, to the works of either of the writers whom we have named.

Dr. Abercrombie speaks of the conclusions to which he arrives with the modesty of a perfect gentleman ; we no where find the opinions of other metaphysicians treated with contempt, or unfair deductions drawn from them in order that they may appear false or ridiculous. It is certainly a very poor ambition to wish to lower the value of the labors of others in order to show our own superiority ; but some metaphysicians never appear so well pleased as when they think they have found an absurdity in the writings of a celebrated philosopher, and often congratulate themselves on the discovery of errors, which exist only in their distorted imaginations.

The science under consideration may be called with propriety an uncertain science, that is, the facts which we suppose that we observe, and the relations which we believe are discovered between them, are often illusory. For these reasons, as well as from the respect which is due to others, we should be careful not to deride an opinion, although its correctness may not be perceived at a hasty glance. Our author expresses himself with clearness on the causes of the uncertainty of intellectual philosophy. After speaking of the reason of the certainty of some sciences, as the pure mathematics, he adds.

‘ With these characters of certainty in the purely physical sciences, two causes of uncertainty are contrasted in those branches of science in which we have to deal with mental operations, or with the powers of living bodies. The first of these depends upon the circumstance, that in investigating the relations and tendencies in these cases, we are generally obliged to trust to observation alone, as the phenomena happen to be presented to us, and cannot confirm and correct these observations by direct experiment. And as the actual connexions in which the phenomena occur to us are often very different from their true relations, it is in many instances extremely difficult to ascertain the true relations ; that is, to refer effects to their true causes, and to trace causes to their true effects. Hence just conclusions are arrived at slowly, and after a long course of occasional observations ; and we may be obliged to go on for a long time without acquiring any conclusions which we feel to be worthy of confidence.

In these sciences, therefore, there is great temptation to grasp at premature inductions, and when such have been brought forward with confidence, there is often difficulty in exposing their fallacy ; for in such a case, it may happen that as long a course of observation is required for exposing the false conclusions, as for ascertaining the true. In physical science, on the other hand, a single experiment may often overturn the most plausible hypothesis, or may establish one which was proposed in conjecture.

‘The second source of uncertainty in this class of sciences consists in the fact that, even after we have ascertained the true relations of things, we may be disappointed of the results which we wish to produce when we bring their tendencies into operation. This arises from the interposition of other causes by which the true tendencies are modified or counteracted, and the operation of which we are not able either to calculate upon or to control. The new causes which operate in this manner, are chiefly certain powers in living animal bodies, and the wills, feelings, and propensities of masses of human beings, which we have not the means of reducing to any fixed or uniform laws. As examples of the uncertain sciences, therefore, we may mention medicine, and political economy ; and their uncertainty is referable to the same sources ; namely, the difficulty of ascertaining the true relations of things, or of tracing effects to their true causes and causes to their true effects ; and the intervention of new causes, which elude our observation while they interfere with the natural tendencies of things, and defeat our attempts to produce certain results by bringing these into action. The scientific physician well knows the difficulty of ascertaining the true relations of those things which are the proper objects of his attention, and the uncertainty which attends all his efforts to produce particular results. A person, for example, affected with a disease, recovers under the use of a particular remedy. A second is affected with the same disease, and uses this remedy without any benefit, while a third recovers under a very different remedy, or without any treatment at all. But even in these cases, in which he has distinctly ascertained true relations, new causes intervene, and disappoint his endeavors to produce results by means of these relations. He knows, for example, a disease, which would certainly be relieved by the full operation of diuretics, and he knows various substances which have unquestionably diuretic virtues. But in a particular instance he may fail entirely in relieving the disease by the most assiduous use of these remedies ; for the real and true tendencies of these bodies are interrupted by certain other causes in the constitution itself, which entirely elude his observation, and are in no degree under his control.’

The reasoning here used is very general, and it will be found that such is the case throughout the work. Although the principal points of investigation, conducted in this manner, are easily understood with little attention by most persons, yet they are not comprehended in all their extension, unless the mind has been previously much disciplined in this mode of reasoning, so that it can readily call up a great number of examples under each general observation. We observe also that a constant reference is had to medical science; every opportunity of giving an illustration from it is seized; every example drawn from intellectual philosophy, or any other study which would tend to confirm a proper mode of conducting our inquiries on that subject, or of overturning an improper manner of deducing consequences, is brought forward. The writer no where allows us to lose the idea, that the volume was intended for medical men.

After having prepared the way, and smoothed the impediments, he proceeds to consider the essence of mind. It is well known, that there are two great classes of moral philosophers: one, that regards the mind and body as two essences wholly distinct, the other, that considers the mind as a consequence,—a result of the organization of the body. Those of the former class are called immaterialists, and of the latter materialists. Abercrombie conceives that we are unable to decide by *argument* whether the mind is immaterial or material, * but very justly intimates that if it were proved material or immaterial, still the question of its immortality would not be affected in the least. We agree with him that this subject cannot be explained philosophically.

‘We talk indeed,’ says he, ‘about matter, and we talk about mind; we speculate concerning materiality and immateriality, until we argue ourselves into a kind of belief that we really understand something of the subject: the truth is that we understand nothing. Matter and mind are known to us by certain properties; these properties are quite distinct from each other: but in regard to both it is entirely out of the reach of our faculties to advance a single step beyond the facts which are before us. Whether in their *substratum* or ultimate essence they are the same, or whether they are different, we know not

* Very few of those termed materialists believe that the mind is material.

and never can know in our present state of being. We know nothing of the nature, or the essence of mind; but whatever may be its essence, and whatever may be the nature and extent of that mysterious connexion, which the Deity has established between it and our bodily organization, these points have no reference whatever to the great question of its future existence.'

Marat, the celebrated revolutionist, in a treatise on physiology, after asserting that man is composed of two distinct parts, body and mind, adds, that he shall not stop to prove so well established a truth, and that, if any of his readers entertain the least doubt, they may dispense with the perusal of his work; as he did not write for the benefit of such persons. Abercrombie does not speak so positively, but it may be easily gathered from his observations, that, like the greatest portion of mankind, he believes the doctrine of the immaterialists, that the mind and body are very distinct from each other. Indeed, in his definition of mind we perceive, that he discards the ideas of those who consider this faculty as a result of organization. 'The mind,' says he, 'is that part of our being, which thinks and wills, remembers and reasons.'*

The unionist considers that thoughts are what constitutes the mind, that they are the mind, and believes that they result necessarily from the organization of the body. The immaterialists, with Abercrombie, take for granted, that there is an invisible power that thinks; the unionists take for granted, that thoughts are the natural result of our organization. Both leave the ground of philosophical inquiry, to speculate. Both agree that there must be an agent to produce the thoughts: the one class suppose the agent to be one thing, and the other class another. Abercrombie supports the doctrines of the immaterialists, in this respect, by these considerations. 'The term, *matter*, is a name which we apply to a certain combination of properties, or to certain substances which are solid, extended, and divisible, and which are known to us only by these properties. The term *mind*, in the same manner, is a name which we apply to a certain combination of functions, or to a certain power which we feel within, which thinks and wills and reasons, and is known to us only by these functions. The former we know only by our senses, the

* We shall term these unionists, to distinguish them from those whom Abercrombie calls materialists.

latter only by our consciousness. In regard to their essence or occult qualities, we know quite as little about matter as we do about mind, and, as far as our utmost conception of them extends, we have no ground for believing that they have any thing in common.' The true object of philosophy is simply to investigate the facts in regard to both, and materialism is to be viewed not only as unsound reasoning, but as a logical absurdity, and a total misconception of the first principles of philosophical inquiry. Does the materialist tell us that the principle which thinks is material, or the unionist that it is the result of organization? we have only to ask him, what light he expects to throw upon the subject by such an assertion. For the principle which thinks is known to us only by thinking, and the substances which are solid and extended are known to us only by their solidity and extension. When we say of the former, that it is immaterial, we simply express the fact that it is known to us by properties altogether distinct from the properties to which we have given the name of matter, and, as far as we know, has nothing in common with them. Beyond these properties, we know as little about matter as we do about mind, so that materialism is scarcely less extravagant than would be the attempt to explain any phenomenon, by referring it to some other, altogether distinct and dissimilar: to say, for example, that color is a modification of sound, or gravity a species of fermentation. The assertion, indeed, would be fully as plausible, and calculated to throw as much light upon the subject, were a person, anxious to explain the nature of matter, to tell us that it is the result of a particular manifestation of mind. Something analogous to this, in fact, seems to be the foundation of the theory of Boscovich, who conceives that all bodies consist of extended atoms, or mathematical points, endowed with a certain power of repulsion, and consequently makes the essence of matter to consist merely in the property of resistance. We have, in truth, the same kind of evidence for the existence of mind, that we have for the existence of matter: namely, from its properties; and of the two, there seems to be the least chance for deception in regard to the former. 'Of all the truths we know,' says Mr. Stewart, 'the existence of mind is the most certain. Even the system of Berkeley concerning the non-existence of matter is far more conceivable, than that nothing but matter exists in the universe.'

‘A similar mode of reasoning may be applied to the modification of materialism, more prevalent in modern times, by which the mind is considered as a result of organization, or in other words, a function of the brain ; and upon which has been founded the conclusion that, like our bodily senses, it will cease to be, when the bodily frame is dissolved. The brain, it is true, is the centre of that influence, on which depend sensation and motion. There is a remarkable connexion between this organ and the manifestations of mind ; and by various diseases of the brain, these manifestations are often modified, impaired, or suspended. We shall, hereafter, see that these results are very far from being uniform ; but even if they were uniform, the facts would warrant no such conclusion respecting the nature of mind : for they accord equally with the supposition that the brain is the organ of communication between the mind and the external world. When the materialist advances a single step beyond this, he plunges at once into conclusions, which are entirely gratuitous and unwarranted. We rest nothing more upon this argument, than that these conclusions are unwarranted ; but we might go farther than this, and contend that the presumption is clearly on the other side, when we consider the broad and obvious distinction which exists between the peculiar phenomena of mind, and those functions which are exercised through the means of bodily organization.’

It is clearly to be perceived that the main part of this argument is brought against the doctrines of the materialists, or those who maintain that the mind is material ;—doctrines with which we do not pretend to be well acquainted, but which we should suppose, from what we know of them, to be too absurd to need refutation. The principles of the unionists, however, (of which Abercrombie has an obscure idea) are entitled to respect and a careful examination, not only from the strong arguments advanced in support of them, but also from the fact of their adoption by some of the most celebrated scholars, among whom we may reckon the Count de Tracy, Cabanis, Richerand, and Jeremy Bentham. Although the writers of this school should be in error in this particular instance, yet in many of their productions they are noted for a rigid adherence to the principles of legitimate deduction ; and, notwithstanding some irregular inferences, to which we are all liable from our nature, we may safely conclude that their profound meditations will be read and admired through succeeding ages.

We are probably not at present in possession of the means

to decide positively by argument whether there is an occult principle which thinks, or whether our thoughts are a necessary consequence of our organization and situation. Nor do we perceive, what important results would follow from the discovery of the truth of either theory, though we acknowledge that many valuable facts are often brought to light from the resolution of some obscure and apparently insignificant question. But when we consider, that the objects of this science are so numerous, and its branches so extensive; and observe that it is as yet scarcely more than a collection of crude facts, whose authenticity, in some instances, is not fully determined, and whose connexion and relations we have hardly attempted to trace, it seems unprofitable to waive the discussion of the most important principles, in order to dispute concerning a question, the determination of which, if possible, would be attended with no certain advantage.

It is, perhaps, very proper sometimes to indulge in speculations to a reasonable extent, concerning points like this; but then we must always recollect that they are mere speculations, and the conclusions to which we arrive must be regarded as only probable, and not as results, obtained by a course of rigid reasoning. As we have given the arguments of Abercrombie and the immaterialists to support their theory, or rather to destroy the theory of their opponents concerning the mind, it is proper to notice the reasoning of the unionists on this head.

They contend that the objects of this science, like those of every other, are to connect and extend our ideas of its various branches; that the main object is to correct any improper opinions, which are common or universal; that is, to show by a course of careful reasoning, wherein they are incompatible with things which are known to be facts. Now, say they, as the immaterialists take for granted, that the opinions which are generally prevalent, however indefinite and confused, are true, and build their science on these common impressions, it follows that mental philosophy, as it is considered by them, and understood by us, are two sciences as distinct as ancient astronomy, which was built upon opinions which were not only common and prevalent, but universal and natural, and modern astronomy, in which nothing is taken for granted, and all erroneous impressions are exposed.

If the reasoning of the immaterialists is proper, when they

content that their definition of mind is correct, and agreeable to the dictates of common sense, because it is generally understood to be what they describe it, although not one man in a thousand has ever thought with much care on the subject, we are perfectly in the right to say that the arguments of the ancient astronomers were legitimate, and that their doctrines were correct, since the things on which their science was founded, were universally believed. So much for preliminaries. Now, argues the unionist, our belief that the mind is a result of the organization of the body, and is not distinct and wholly unaffected by it, proceeds from these facts. In the early stage of our being, we are wholly without ideas. This is universally admitted, and indeed cannot be denied, as we were not sensible of any ideas, which is the same as having none. It is also admitted by all, and proved, that all our simple ideas are formed, and known to us by our sensations, properly so called. Thus we have the sensation or simple idea of smooth and rough from our feeling, of the various colors and figures from our sight, of sour, sweet, bitter, &c., from our taste, and so on of all simple ideas. We are, therefore, certain that these are the results of our organization.* For if the proper organization of my hand never existed, or were destroyed at an early period, if I moved it on a surface, I could not gain the idea of rough, smooth, &c., and so of the rest of my body. Likewise, if the regular organization of my eyes never existed, or were destroyed before I had used them, I could never have the ideas of color and figure. The same may be said of the other senses.

But, answer the immaterialists, we grant all this: it is a part of our own doctrine; we well know, that the simple ideas are gained by our proper sensations, and are the result of our organization, if you would have us speak in that manner; we believe that the senses are the inlets of the ideas, but we consider the mind as a power that obtains a conception of these ideas, retains them, and forms compound ideas of them by means of certain operations, such as abstraction, concretion, association, comparison, judgment, reflection, imagination, attention, reasoning, memory, reminiscence, volition.

The unionists reply: it has been proved, as you acknow-

* By this is meant our organization in connexion with surrounding objects.

ledge, that the simple ideas are the result of organization, now let us see if we cannot infer from some circumstances that the operations mentioned, and the retention of all ideas, are also the result of organization. To take a common and familiar occurrence; if a man receive a violent blow upon the head, all his senses, ideas, and the operations above mentioned are temporarily or permanently destroyed. He recovers them if nature or art produces a reorganization in the parts affected, but if this is not the case, he is reduced to a state of idiocy, or remains perfectly senseless to his death. It is therefore a fair and regular deduction, that the ideas and all the operations by which they are modified, are consequences of organization, inasmuch as they are suspended or annihilated, when the organization of the more noble parts, where they have their seat, is temporarily or permanently deranged, and are reproduced, when art or nature causes a reorganization.

Again, they add, in answer to the arguments of the immaterialists, that if the mind is a principle distinct from the body that possesses the ideas, or which amounts to the same thing, that perceives or feels the ideas, and the operations which are performed on them, or which it performs on them, and if certain injuries to the body cause the mind to lose all ideas, or to lose the perception of them temporarily or permanently, the mind, in such a case, exists without perceiving any thing. Let us, say they, push this reasoning a little farther. Many times some injuries of the body remove a person from a sound condition of mind to a state of *complete idiocy*, when, although he possesses his bodily senses perfectly, every operation and sensation of the mind are obliterated. He retains none of the simple perceptions or simple ideas which his bodily senses receive, and has no remembrances, judgments or desires. We therefore know from experiment, not only that a disorganization of the body many times removes all ideas from the mind, which then must exist, if it is in being, without perception, but also at the same time, often removes the faculty of acting on the simple impressions, which the person may receive. The mind in such a case has no attribute, and a thing without any attribute is nothing.

Sometimes a person in the state just mentioned, by the operation of surgery, medicine, or nature, or of all three, recovers from his bodily injury, and his mind returns to its

former condition. It is therefore proved, that our ideas or thoughts depend on organization : that is, when the system is properly organized, they are perceived, and when it is disorganized, in some respects, they are not perceived ; and that if there is a principle, which performs the operations of thinking, that principle is destroyed by the disorganization of some parts of the system, and is reproduced or results from a proper organization. Therefore all our thoughts or ideas result from our organization.

These are some of the arguments employed by the unionists, many of whom, like Abercrombie and some other immaterialists, profess to draw no conclusion from their reasoning, except that the hypotheses of their opponents are incorrect and absurd. Their theories, whether true or false, should not hinder us from profiting by the valuable information brought to light by the discussion of this subject, nor from duly appreciating the ingenuity which is shown in conducting their inquiries.

Most of our readers have heard of the doctrine maintained by some talented and celebrated men, that particular qualities of mind are discovered by the appearances of minute portions of the skull. This theory carries the speculations of the unionists, concerning the connexion of the corporeal system and the intellect, farther than we should suppose could be warranted by facts. We ought not, however, to judge rashly of opinions which are maintained by a constant reference to facts, and to facts alone, for proof ; for experience has many times shown us that what has been deemed most improbable, has after a careful examination been found true, and that which all mankind had for ages firmly believed, has been proved fallacious, and universally rejected.

Dr. Abercrombie, we think, is more successful in illustrating those things that are known and admitted, than in supporting or opposing the theories of any particular sect of philosophers. He rarely cuts his way through an untrodden path, but contents himself with giving strong elucidations of general principles. Speaking of the influence of habit or attention, he observes,

‘ In teaching such arts as music or arithmetic, this principle is also illustrated ; for the most expert arithmetician or musical performer is not necessarily, and perhaps not generally the best teacher of the art, but he who with a competent knowledge of it directs his attention to the individual minute combinations, through which it is necessary for the learner to advance.

In processes more purely intellectual, we find the influence of habit brought under our view in a similar manner, particularly in following the steps of a process of reasoning. A person little accustomed to such a process advances step by step, with minute attention to each as he proceeds, while another perceives at once the result, with little consciousness of the steps by which he arrived to it. For this reason, also, it frequently happens that in certain departments of science, the profound philosopher makes a bad teacher. He proceeds too rapidly for his audience, and without sufficient attention to the intermediate steps, by which it is necessary for them to advance; and they may derive much more instruction from an inferior man, whose mental process approaches more nearly to that which in the first instance must be theirs. We remark the same difference in public speaking, and in writing: and we talk of a speaker or a writer who is easily followed, and another who is followed with difficulty. The former retards the series of his thoughts, so as to bring distinctly before his hearers or his readers every step in the mental process. The latter advances without sufficient attention to this, and consequently can be followed by those only who are sufficiently acquainted with the subject to fill up the intermediate steps, or not to require them.'

This principle, which has been so often observed, is strikingly exemplified by the difference with which the language of a foreign country is learned from a native of that country, and from a person who has pursued the same steps in acquiring it as are necessary for the scholar. The latter is familiar with all the difficulties to be overcome, and can refer the peculiarities of construction to a few general principles, which are easily understood. The former can teach the pronunciation, and correct any error in composition or expression, but although every mode of speech in his language is familiar to him, he cannot so well explain the peculiarities of construction, for there seems to him to be no peculiarity in his own tongue. He therefore instructs his scholar rather in detached facts, than in the principles of the language.

We have introduced the above quotation, and adduced this example, not merely with an intention of illustrating the manner of our author, or the influence of habit, or attention; but also in order to support the view which we took of mental philosophy, in the commencement of this article. We there maintained that this science, like all others which are not purely descriptive from their nature, such as anatomy or natural history,

should be built on a few general principles ; and we find new reasons starting up on every side to favor this manner of considering the subject, which has also been adopted by some of the greatest philosophers. In the quotation, he says, 'it frequently happens that in certain departments of science, the profound philosopher makes a bad teacher.' Now to what is this owing ? It seems to be to this, that the profound philosopher is incapable of explaining how the several facts of the science to which he devotes himself, are inferred from some general principles ; so that the relations subsisting between them, showing how the knowledge of some is derived from others, are but faintly perceived. He remembers, distinctly, only the great leading facts ; and when he instructs, he is necessarily bounded to the enunciation of these facts, with remarks and occasional deductions. The learner perceives with difficulty the connexion which one idea advanced has with another ; and being unable to see how some of them are derived from the rest, is obliged to depend almost solely on his memory, for the retention of each fact. But isolated facts, especially abstract ones, are forgotten almost as soon as acquired ; for being associated with nothing, they have nothing to suggest them, and when once lost, are lost forever.

It is reasonable, therefore, that the newly initiated should be best qualified to teach ; as they have distinctly before their minds all the steps by which the facts are drawn from primary truths, and recollect all the relations by which they are connected among themselves. The learner in this case has to exert his memory scarcely more than to retain the first principles ; all the facts are shown to follow from these, of course, and should any one be forgotten or remembered indistinctly, he has merely to go back and determine it with accuracy. The profound philosopher does not succeed because he pursues a bad method, the other does, because he follows the method which we have before indicated to be the best, whether his instructions are delivered orally, or in a written treatise.

Dr. Abercrombie has handled some of Mr. Hume's doctrines rather closely, under the article of testimony. We are happy to observe that he has confined himself to the overstrained theory concerning miracles, and to the other vulnerable positions of that writer. Some metaphysicians consider themselves warranted in attacking any of the conclusions of that

writer on account of his skeptical opinions, but for that very reason it is proper to treat his arguments, when they are noticed, with all the respect which they deserve. For if his correct opinions are disputed and opposed, it leads many persons to suppose that equal injustice is done when his ideas, which are incorrect, and which have a demoralizing influence, are controverted. Our author appears to comprehend the truth of this observation in all its bearings; and also probably thinks himself capable of acquiring a niche in the temple of fame, without destroying the statue of any of his predecessors. It is certainly the characteristic of a noble mind to pursue an independent course, without stopping to consider every sentiment of others, the truth of which is not comprehended at first sight; and yet many metaphysicians, of as much celebrity as Abercrombie, encumber their works with attempted refutations of certain opinions, which would be adopted by them, if they were thoroughly examined.

Abercrombie follows a method of his own, in considering the various operations of the mind. Most of the philosophers of the Edinburgh school, as well as some French metaphysicians, appear to collect all the words referring to our thoughts which come to mind, and give a description of the mental operations which are performed under each of them. Condillac considers the human intellect as composed of understanding and volition. He then decomposes the understanding into attention, comparison, judgment, reflection, imagination, reasoning, memory and reminiscence; and volition into want, uneasiness, inquietude, desire, passions, hope and volition, properly so called,—to which if we add abstraction, concretion, generalization, conception, perception, association, and some others, which have as good a right to a place as the foregoing, we shall have a tolerable list, as incongruous as it is extensive.

Abercrombie deserves some credit for not proceeding in this manner, though his method is, perhaps, not the best that can be imagined. He thus explains the ideas, which induced him to pursue the course which he has taken in this respect.

‘Through the various sounds referred to in the preceding observations, we acquire the knowledge of a certain number of facts, relating either to the mind itself or to things external to it. The next part of our inquiry refers to the operations (to use a figurative expression,) which the mind performs upon the facts

thus acquired. The term functions, or powers of mind, has often been applied to these operations; but as we are not entitled to assume that they are not in fact separate functions, in the usual acceptation of that expression, it is perhaps more correct, and accords better with our limited knowledge of mind, to speak simply of the operations which it is capable of performing upon a given series of facts. These seem to be chiefly referable to the following heads.

I. We remember the facts, and we can also recall them into the mind at pleasure. The former [operation] is memory, and the latter is that modification of it which is called recollection. But besides this simple recollection of facts, we can recall a perception: that is, the impression of an actual scene, which has been witnessed, or a person who has been seen, so as to place them as it were before the mind, with all the vividness of the original perception. This process is called conception. It is often described as a distinct power, or a distinct operation of the mind; but it seems to be so nearly allied to memory, that it may be considered as a modification of it. It is the memory of a perception.

II. We separate facts from the relation in which they were originally presented to us, and contemplate some of them apart from the rest: considering, for example, certain properties of bodies apart from their former properties. Among a variety of subjects, we thus fix upon qualities, which are common to a certain number of them, and we arrange them into genera and species. This process is usually called abstraction.

III. We separate scenes or classes of facts into their constituent elements, and form these elements into new combinations, so as to represent to ourselves scenes or combinations of events, which have no real existence. This is imagination.

IV. We compare facts with each other, observe their relations and connexions, and trace the results which follow particular combinations of them. We also observe their general characters, so as to deduce from the whole general facts or general principles. This is reason or judgment.

In this arrangement, it will be observed, I confine myself entirely to facts. I do not say that the mind possesses distinct faculties, which we call memory, abstraction, imagination, and judgment, for this at once leads into hypothesis, but simply, that in point of fact, the mind remembers, abstracts, imagines, and judges. These processes appear to constitute distinct mental acts, which every one is conscious of who attends to the phenomena of his own mind. But beyond the simple facts, we know nothing, and no human ingenuity can lead us one step farther.

Some of the followers of Dr. Reid appear to have erred in this respect, by ascribing to the mind distinct faculties or functions, somewhat in the manner in which we ascribe to the body distinct senses. Dr. Brown, on the other hand, has shown much ingenuity in his attempts to simplify the arrangement of the mental processes, by referring them all to his two principles of simple and relative suggestion. But without inquiring what has been gained to the science by this new phraseology, and avoiding entirely any system which seems to suppose distinct functions of mind, I confine myself to facts, respecting the actual mental operations; and it appears to answer best the purposes of practical utility, to speak of these operations in the arrangement, and by the names, which are commonly used by the generality of mankind.'

Most authors of the Edinburgh school reason in the same way concerning functions and operations of the mind. Their meaning is not very obvious; but we think that they argue much in the same way as a mathematician, who, in an introduction to a treatise on mechanics, should inform his readers that he should avoid entirely any system that seemed to suppose distinct manners in which motions acted, and therefore should not treat of the theoretical functions of motion in the mechanical powers, but should confine himself to facts respecting actual mechanical operations. In such a case it would be necessary to describe all the machines in use, in order to give a complete treatise. But to complete the analogy between these philosophers and the mathematician, the latter should take certain things which happen to come to his memory, such as a steam-engine, a clock, a stair-case, a skate, a clepsydra, a top, a windmill, and a few other things of such a nature, (if they really have any thing in common,) and after repeating over and over again, that he shall pursue no system, and shall confine himself wholly to facts, should describe these things, and call this description an elementary treatise on mechanics.

If a mathematician should write an elementary work on mechanics in such a manner, at this day, would he not pass for a madman? And yet a stair-case, a skate, and a top, are in our opinion more deserving the name of machines, than recollection, abstraction, or attention, are of distinct operations of the mind, to say nothing of hope, the passions, &c. Should a mathematician describe all the actual mechanical

operations, or even only those which are very important, when he treats of the science of motion, the subject would be extended almost to infinity. So, if a metaphysician should attempt to describe all the important mental operations, as the philosophers of the Edinburgh school profess to do, he would find the labor endless.

When the essays of the metaphysicians of whom we are speaking are examined, we find that many of the operations of the mind, which are there described, are no more deserving of notice than hundreds, and in fact thousands, which are not named. We may observe here, by the way, that an operation of the mind is just as much so, if it is expressed in our language or in any other by one word, or by a dozen or twenty.

The writer on mechanics analyzes all possible machines, and finds that they are combinations of a few simple ones, which can be decomposed into no others; and the science of mechanics consists in the description of these *simple* machines. A person who understands this description can calculate the effect of any machine, however complicated. We see no good reason, why the science of ideas should not be pursued in the same manner. The operations of the mind should be analyzed, till we arrive at some which admit of no decomposition. These will be the simple elementary operations. But what are these operations? They appear to be memory, judgment, or the perception of relations, and volition.* The last-mentioned operation produces a greater or less effect on our thoughts, and the actions of our body. Why these effects follow from the existence of any desire, or volition, we do not know, but the fact is certain.

Let us now see, if all the mental acts cannot be decomposed into those which we have named.

1. Attention.—I attend a public meeting; I judge that, in order to understand the speaker, I must think of nothing but what he advances. This is a judgment. I desire to understand him, and to think only of his words. This is a desire, and generally produces a proper effect on my thoughts. Attention is nothing else. The Count de Tracy answers all objections to this reasoning. ‘But,’ says one, ‘when I pay *atten-*

* We do not call a simple sensation an operation of the mind, though we think that would be correct. This has no bearing on what we have to advance.

tion to a sensation, I feel it, and all the rest disappears.' In this case, you do not perceive anything else, and you have a sensation: that is all. You would have the perception of a remembrance, a relation, or a desire in the same manner. Another answers, 'attention becomes all these. In that case it is composed of these elements, and is nothing by itself.'

2. Comparison.—In comparing two or more things, we either perceive those things, or more properly the qualities of those things, with our senses; or recollect them, and feel the relation between them.

3. Judgment.—This is a simple operation. When we perceive a relation, that is a judgment: a perception of a relation and a judgment are the same thing. When I judge that a man is handsome, I perceive a relation existing between the idea of that man, and the idea of beauty.

4. Reflection.—When we desire to discover the truth with regard to a certain thing, in consequence of this desire we endeavor to recall or recollect ideas, relating to the subject, so as to perceive relations between these ideas, and form a series of judgments. This is reflection; it is merely to remember and judge.

5. Imagination.—Let us take an instance of the exercise of this operation. Suppose I have the desire of creating a curious, fantastical house in my fancy, or imagination, I recall to mind, or in other words, I recollect certain parts of houses and buildings, which I have seen. By the exercise of volition, I associate these parts in any manner I please, or in other words, I recollect them at the same time, and in any disposition, which my judgment directs as best for the purpose I have in view. I then have the idea of a house in my mind. When I recollect a thing so strongly that I even believe it present, it is only a lively exercise of memory.

6. Reasoning is a series of judgments.

7. Reminiscence.—This is defined as being a remembrance, with a knowledge that it is a remembrance. It is then a remembrance and a judgment.

8. Want.—This feeling is the desire of something.

9. Uneasiness and inquietude are states caused by some desire.

10. Passions are desires of producing pleasure or pain to some being. Some result directly from organization, and some do not.

11. Abstraction.—Volition or desire enables us to direct our mind to such ideas, as we choose. Abstraction therefore is nothing but the exercise of these powers.

12. Concretion and generalization are the same as abstraction.

13. Conception is simple memory.

14. Perception is either a sensation, properly so called, or a remembrance.

15. Association is a relation existing, or more properly speaking, perceived between ideas.

We might continue and decompose all the operations of the human mind into the elementary ones of memory, judgment, and desire, or volition. It is not intended to maintain, however, that these are *distinct faculties* : we believe as firmly as Abercrombie, that such is not the case ; that they are intimately connected ; and further we doubt whether a being can have any one of them, without possessing the others in a greater or less degree. We say in a greater or less degree, for some of the operations may be in lively exercise, and another almost null, of which we have many instances, but not quite so, for if any one of these faculties were perfectly destroyed, it is probable that the others would be annihilated. Nor do we intend to maintain, that it is wholly without advantage to describe some of the complex mental operations. There is a strict analogy in this respect, between the science of mechanics, and the one which we are considering. In that, we find it advantageous to give a description of the wheel and axle, the screw, and the wedge, as simple elementary machines, although the first may be referred to the lever, the second to the lever and inclined plane, and the last to the inclined plane. It is also very convenient to use words, as they are generally adopted. If Abercrombie had banished conception and recollection from his list of mental operations, added volition, and built the science of ideas on the operations thus expressed, his method would have been little different from that which we should consider the best. The science of mechanics has been spoken of in connexion with mental philosophy, more in order to refer the latter to some *certain* science, than because mechanics have any analogy with it, which is not possessed by others.

The manner in which we have analyzed the operations of the mind, is not original with us. Something like it was adopted by Count de Tracy, in his treatise on intellectual phi-

losophy. It seems to be free from objections. His work, notwithstanding many errors, some of which have been observed by the Baron Degerando in his *Histoire comparée des Systèmes de Philosophie*, contains many valuable investigations.

In the study of the human intellect, as well as in all others, we think that nothing should be taken for granted. When things are considered as true in the certain sciences, because they appear to be facts, we are much less liable to error than in the uncertain sciences, where appearances are almost as often fallacious as the contrary. But ought any science to be founded on suppositions and appearances? We doubt it: although Dr. Abercrombie and many others are of a different opinion.

Abercrombie has given a list of what he calls first truths, which he believes incapable of explanation. He introduces them in the following manner, at the commencement of the article on Reason.

‘ In applying our reason to the investigation of truth in any department of knowledge, we are, in the first place, to keep in mind, that there are certain intuitive articles of belief, which lie at the foundation of all reasoning. For in every process of reasoning, we proceed by founding one step upon another which has gone before it, and when we trace such a process backward, we must arrive at certain truths, which are recognised as fundamental, requiring no proof, and admitting of none: these are usually called first truths. They are not the result of any process of reasoning, but force themselves with a conviction of infallible certainty upon every sound understanding, without regard to its logical habits or powers of induction. The force of them is accordingly felt in an equal degree by all classes of men; and they are acted upon with absolute confidence in the daily transactions of life. This is a subject of great and extensive importance. The truths or articles of belief, which are referable to it, are chiefly the following.

‘ 1. A conviction of our own existence as sentient and thinking beings, and of mind as something distinct from the functions of body. From the first exercise of perception we acquire a knowledge of two things: namely, the thing perceived, and the being who perceives it. In the same manner, from the exercise of any mental operation, such as memory, we acquire an impression of the thing remembered, and of an essence or principle which remembers it, and of this essence as something entirely distinct from any function of the body. The last conviction must be

considered as a first truth, or intuitive article of belief, standing on the same ground with the other truths which are referable to this class. It does not, as was formerly stated, rest upon any metaphysical or physiological argument, but upon an appeal made to the conviction of every man, who attends to what is passing within. It resolves itself into the consciousness of the various mental processes, impressions, and emotions, as referable to one permanent and unchanging essence, while the body is known to be in a constant state of change; and of these processes, as being exercised without any necessary dependence upon present impressions from external things. Like other truths of this class, it is consequently unaffected by sophisms which are brought against it, and the answer to these does not properly consist in any process of reasoning, but in this appeal to every man's absolute conviction. If brought into comparison, indeed, the evidence which we have for the existence of mind is perhaps less liable to deception, than that which we have for the existence of matter.

II. A confidence in the evidence of our senses, in regard to the existence and properties of external things, or a conviction that they have a real existence independent of our sensations. We have formerly referred to a celebrated doctrine, by which it was maintained that the mind perceives only its own ideas or impressions, and that, consequently, we derive from our senses no evidence of the existence of external things. The only answer to such a sophism is, that a confidence in the evidence of our senses is a first truth, or intuitive principle of belief, admitting of no other proof than that which is derived from the universal conviction of mankind.

III. A confidence in our own mental processes; that facts, for example, which are suggested by our memory, really occurred.

IV. A belief in our personal identity. This is derived from the combined operation of our consciousness and memory, and it consists in remembrance of past mental feelings, as belonging to the same sentient being. There were formerly many disputes on this subject; some maintaining that the notion of personal identity is inconsistent with the different states in which the mind exists at different times; as love and hatred, joy and sorrow, and also with the remarkable changes of character which often take place at different periods of life. This was one of the sophisms of the schools, founded upon an obscure analogy with changes which take place in material things, and is not at all applicable to mind. The only answer to the paradox is, that every man, under every variety of mental emotions, and every possible change of character, retains an absolute conviction that the sentient being, whom he calls himself, remains invariably the same,

and that, in all the affairs of life, whether referring to the past or the future, every man acts upon this conviction.

V. A conviction that every event must have a cause, and a cause adequate to the effect ; and that appearances, showing a correct adaptation of means to an end, indicate design and intelligence in the cause. These, as fundamental truths, are quite distinct from the question relating to the connexion of any two specified events as cause and effect. The latter belongs to another part of our inquiry.

VI. A confidence in the uniformity of nature, or that the same substance will always exhibit the same characters, and that the same cause, under the same circumstances, will be followed by the same effect. This, as a first truth, is a fundamental and instinctive conviction. The province of experience, we have already seen, is to ascertain the particular events which are so connected as to be included under the law.'

In the practical concerns of life it is necessary for us to act upon certain facts with absolute confidence, although we have never explained them, nor been able to prove or demonstrate their reality. *But it is by no means certain that every fact cannot be explained, proved, demonstrated.* The contrary is often asserted ; but mere assertions are not to be received as truths, even when they come from such distinguished scholars as Dugald Stewart, or John Abercrombie. That many persons have attempted to explain certain things, and have failed, is undeniable, but this only shows that their reasoning has been imperfect, and not that they have been unsuccessful from the nature of the things which they considered. If Archimedes, and other geometricians had regarded the unfruitful efforts of their predecessors in certain branches of science, as a proof that they could never extend their researches beyond a point which had already been attained, we should be at present entirely ignorant of innumerable facts, which have had an important, we had almost said, an all-important effect on the destinies of the human race.

It may be answered, that when things are known,—are self-evident, that it is a waste of labor to attempt to explain them. That may be ; but is it a waste of labor, to explain why their truth is perceived as soon as they are stated ? If so, we would inquire if it is not perfectly plain to every sound understanding, that when two straight lines cut each other, the opposite angles at the vertex are equal ; that when two straight lines are cut by

a third at right angles, these two lines cannot meet each other if produced. Is it useless, and worse than useless to explain, —prove,—demonstrate why these propositions and all others of the same kind are known to be true? Why then are not all our mathematical works consigned to the flames, and others substituted, so that none of our precious time may be thrown away?

We know that some things are usually enunciated as self-evident in mathematical works; but it is also well to observe that most of the self-evident things, the axioms of ancient authors, are demonstrated in modern improved works, and that they are all susceptible of proof. Let us see, if the axioms admitted by the late writers, cannot be demonstrated. To take the most difficult. ‘Two magnitudes, whether they be lines, surfaces, or solids, are equal when, being applied the one to the other, they coincide with each other entirely; that is, when they exactly fill the same space.’ In that case all that can be said of one of the two things (abstraction made of every quality of physical things except magnitude), can be said of the other; these two magnitudes are therefore precisely the *same*, and of course are equal. This little demonstration may appear minute, but we can assure our readers that the axiom stated is not self-evident to young persons, little accustomed to compare theories of things.

It is not so dangerous to use axioms in the certain sciences, as in those which are uncertain, like mental philosophy; for in the first case, though they be obscurely stated, and should indeed be false (which is not likely to happen, as the ideas of the most uninstructed person on *extent* are remarkably clear and precise,) they lead to some manifest absurdity when they are applied, so that their fallacy may be detected. But if they should be false in the second case, we can never tell how far they may lead us astray.

It is well to recollect, moreover, that a thing is not true, because we believe it so, nor because a conviction of its reality forces itself upon every sound understanding, even in the certain sciences. The whole of the human race may regard a thing as a fact beyond all doubt for thousands of years, and yet be wretchedly mistaken, as experience has shown in many instances. We ought also to keep constantly in mind, that there is no fact which is known, however simple or complica-

ted it may be, the truth of which cannot be demonstrated. This assertion must not be misunderstood ; we do not pretend to say that a thing which is *unknown* can be explained,—that its reality can be demonstrated. We speak only of things which are *known*. We know that the grass grows ; the fact can be explained, and demonstrated with all precision, but how it grows, or why it grows, we do *not know*, and of this can give no explanation. We know that our will causes motions of our body ; we can prove it, but how or why it operates in this manner, is unknown, and inexplicable.

Most persons recognise numberless facts, of the truth of which they can give no account, except that they know them : indeed there are few persons who can explain all their ideas. But the man of a cultivated mind analyzes most of or nearly all his thoughts, while the rustic contents himself with asserting that things are so and so, ridicules those who are unwilling to govern themselves by appearances, and stigmatizes, as degraded, the man who opposes one of his dogmas.

We can regard it as nothing but an appeal to vulgar prejudices, when we hear an assertion like the following. ‘In every process of reasoning, we proceed by founding one step upon another, which has gone before it, and when we trace such a process backwards, we must arrive at certain truths, which are recognised as fundamental, *requiring no proof and admitting of none.*’

Let us consider some of the primary truths of Abercrombie. The first fact that we know, is our own existence as sentient or thinking beings : this is the foundation of all our other knowledge. At what period do we know our existence, and how is it discovered ? Abercrombie does not pretend, and cannot pretend that a knowledge of that period is a first truth, nor that the manner in which we first discover that we exist, is a first truth. These two curious questions are then left by him open to discussion. In order to decide them, we must determine with precision in what our existence consists,—our existence as sentient or thinking beings. It obviously consists in nothing else than in having sensations or thoughts : for if we had no sensations or thoughts, we should not be sentient or thinking beings. The moment therefore that we have a sensation, properly so called, a remembrance, a judgment or a desire, that moment we are *sensible of* our existence. In

other words, from that moment it is demonstrated to us that we exist.

Although we have here not directly considered any of the first truths of Abercrombie, it is evident that one of them is demonstrated, if we have succeeded in what we attempted. But, says one, our sensations or simple ideas are sometimes illusions, and we do not know that they are not so in this case, as well as in every other. This assertion we deny. Our sensations or simple ideas are never illusions. If I see a spectre, I certainly have a sensation; though it may be the same as that which I receive from a real being, and though I attribute it to a wrong cause. If a white house, from being seen in the night, or from some other cause, appears black, I have the sensation,—the simple idea of black; experience proves the fact; but if I attribute the quality black to the house, I form a compound idea of this house, which is false. The disciple of Abercrombie may maintain, that since we have shown that our existence consists in having sensations or feelings, in order to prove that we really exist, we should demonstrate that we have a feeling that we *know* the fact. We answer,—that we have feelings is a truth of experience, inaccessible to error,—it is not taken for granted, but is *proved by experience*; to have a feeling and to know that we have it is the same thing. If we attribute the quality of feeling, which we possess, whether of simple or compound ideas, to an immaterial essence, or to our organization, we form a compound idea, which may be true, or which may be false.

The celebrated Descartes proved our existence somewhat in the same manner, but gave no explanation. ‘I think,’ said he, ‘therefore I exist.’ The metaphysicians of the Edinburgh school suppose that he begged the question in this case. But we think that the sentiments of so profound a philosopher as Descartes should be examined with a little attention, before coming to such a conclusion. We should not be deceived by the *form* of his argument. It is evident that he considered our existence to consist in thinking; our simple thoughts or ideas he knew, and supposed his readers understood, to be more clearly and unerringly demonstrated to us by experience. He therefore very naturally and correctly concluded that he had proved our existence.

We have given some of the arguments of the unionist con-

cerning the second part of Abercrombie's first primary truth, and we apprehend that those of his school will find it much easier to call them fallacious, sophistical, reasonings in a circle, &c., than to demonstrate their obscurity. The other primary truths, which he recognises, are very complicated ideas, and we think they ought not to be stated in a treatise on intellectual philosophy, where the professed object is to explain the origin of our thoughts, unless they are also analyzed, and their truth or falsity, or more properly, the reasons of their truth or falsity determined. For, we repeat it, the belief of one man, of a thousand men, or of all mankind, is no proof: though it may be entitled, from its prevalence, to a careful consideration,—to a consideration sufficient to determine the grounds of its certainty or fallacy.

On the whole, the work of Dr. Abercrombie must be considered as containing much useful information. The method of communicating the result of his researches, may not be the one best calculated to improve the science of ideas; but we have many valuable facts stated, which are especially important for the profession of which he is a member. With the exception of a few addresses to the passions and prejudices of the multitude, he pursues the course of a lover of truth, who is willing to have the sentiments which he adopts stand or fall by their merits. For the humble spirit of a Christian, which appears in many parts of his writings, he merits the respect of all. If some of his arguments are formed with little attention to vigor, we must remember that he did not write for the instruction of professors, but for many who cannot appreciate a course of reasoning that is not conducted in a popular manner. And besides, his inquiries were pursued, during the short and irregular intervals of his practice. There are many interesting anecdotes interspersed throughout the work, which afford amusement, and give a relief to the whole. The articles on reason, and the application of the rules of philosophical investigation to medical science, we propose to notice hereafter.
